A FURTHER RECORD OF A CHITON (NUTTALLINA) WITH NINE VALVES

BY S. STILLMAN BERRY
Redlands, California

I have been greatly interested to read Mr. Iredale's note on nine-valved chitons in the April *Nautilus*. Only the accident of my suddenly having to drop all scientific work for a time prevented the odd coincidence of my having in the hands of the editors another note on the same subject at the same time and perchance for publication in the same issue. The coincidence is past but the more enduring interest remains.

Miss Edna N. Wilson kindly submitted to me last year a beautiful 9-valved shell of our common southern Californian *Nuttallina*,[1] collected by herself at the Devil's Slide, La Jolla, California. It is a well-preserved dried shell in good condition, the ridge being considerably less eroded than is usual in specimens of this species. The interior is of the usual light slaty hue with the anterior portions of the valves more blackish. Valves v and vi are the largest, as indicated by the accompanying somewhat crude camera sketches. The dimensions of the specimen are, maximum longitude (very slightly curled) 33.4, maximum latitude 14.6, longitude shell only 32.6, width of tegmentum of valve v 11.4, altitude 5.7 mm.

The specimen seems not at all abnormal except for having an extra valve, and just *which* valve, if in fact it is possible to nominate any single one more than another for the distinction, can be called the interpolated one, I should not care to have to say. A photographic illustration would convey all this much better than the outlines can do and this I hope to find myself in a position to offer on a subsequent occasion.

[1] *N. scabra* (Reeve 1847), *non Chiton scaber* Blainville 1825; latterly referred by Pilsbry (1898) to *N. fluxa* (Carpenter 1864).

If Iredale's search of the literature is accepted as exhaustive, this is the fifth recorded example of a chiton with a supernumerary valve (hypermerism).

LITERATURE

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IREDALE, T., & HULL, A. F. B. :26. A monograph of the Australian loricates. (Phylum Mollusca—Order Loricata). VII. Australian Zoologist, 4: 256–276, pl. 37–39, April 1926.

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LONGEVITY OF MITRA IN CAPTIVITY

G. DALLAS HANNA AND LEO GEORGE HERTLEIN

On August 11, 1932, Templeton H. Crocker and party dredged five specimens of a large black *Mitra* in 6½–14 fathoms in Santa Maria Bay, Lower California. The dredging station was number D–24–R and the lot has since been given the number 27,594 (C.A.S.). Three of these specimens were kept alive in tanks on board the ship and were brought to the Steinhart Aquarium in San Francisco. Two of them died very soon thereafter but the third lived until June 6, 1934. During this time it was kept in a small salt water tank with other marine life and supplied with circulating unfiltered sea water from a local source. No attempt was made to control the temperature of the water and it seems rather remarkable that a subtropical species should be able to exist under these conditions for so long a period of time. The animal was evidently fully adult when received and did not increase in size.

The species was recently described as *Mitra zaca* by Messrs. Strong, Hanna and Hertlein (Proc. Calif. Acad. Sci. ser 4, vol. 21, no. 10, p. 120, pl. 5, fig. 10), and the holotype is number 6061 (C.A.S.). One specimen has been deposited in the collection of Mr. Herbert N. Lowe. The species is unquestionably closely related to *Mitra swainsonii* Reeve, (Conch. Icon. Vol. 2, *Mitra*, sp. 4, pl. 1, fig. 4, August, 1844), dredged in mud, seven fathoms,